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The Effect of Earnings Volatility, Audit Committee Meetings, and Audit Tenure on Audit Report Lag with Auditor Industry Specialization as Moderation

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Abstract

This study aims to analyze the effect of earnings volatility, audit committee meetings, and audit tenure on audit report lag with auditor industry specialization as a moderating variable in food and beverage sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2019–2024. This study uses a quantitative approach with secondary data obtained from annual financial reports. The sample consists of 22 food and beverage companies selected using the purposive sampling method. The data analysis technique used is panel data regression with moderation testing through variable interaction. The results show that earnings volatility and audit tenure significantly affect audit report lag, while audit committee meetings have no significant effect. Auditor industry specialization is proven to moderate the relationship between earnings volatility and audit report lag as well as between audit tenure and audit report lag, but it does not moderate the relationship between audit committee meetings and audit report lag. These findings provide practical implications for companies, auditors, investors, and regulators in improving reporting efficiency and corporate governance quality.

Keywords: earnings volatility, audit committee meetings, audit tenure, audit report lag, auditor industry specialization

INTRODUCTION

Globally, the timeliness of financial reporting has become a critical issue affecting the efficiency and transparency of capital markets. Investors and stakeholders rely heavily on timely financial information to make informed investment decisions, as delayed reporting can lead to information asymmetry and reduced market efficiency (Hassan, 2018). The phenomenon of audit report lag has attracted significant attention from researchers and regulators worldwide, particularly as it directly impacts the relevance and usefulness of financial information for decision-making purposes (Bryan & Mason, 2020; Bhuiyan et al., 2024; Abernathy et al., 2017). In various countries, studies have shown that audit report lag varies significantly across industries, with some sectors consistently experiencing longer reporting delays due to their unique operational complexities and regulatory requirements.

The complexity of modern business operations has increased the demand for specialized audit expertise, particularly in industries with unique characteristics and regulatory frameworks. Every industrial sector has unique characteristics that influence business patterns and financial reporting, requiring deep understanding and specific experience to identify irregularities in the audit process (Donatella, 2022). This global trend toward audit specialization reflects the growing

recognition that generic audit approaches may be insufficient for complex industries that require sector-specific knowledge and expertise.

In the Indonesian context, the food and beverage sector represents one of the most significant contributors to the national economy, yet it faces unique challenges in financial reporting and audit processes. Companies listed on the Indonesia Stock Exchange (IDX) are classified under various sectors based on the IDX Industrial Classification (IDX-IC) system, which has been widely implemented during the 2019–2024 period to provide better structure in grouping companies according to their industrial fields. The food and beverage sub-sector, as part of the primary consumer goods sector, has unique characteristics in its operations and financial reporting that distinguish it from other sectors.

The food and beverage sub-sector is one of the main drivers of the Indonesian economy, encompassing companies that produce various consumer products such as processed foods, soft drinks, dairy products, packaged foods, and various other consumer products. This sub-sector has special characteristics such as relatively short production cycles, dependence on raw materials that often experience price fluctuations, strict food safety regulations, and demand patterns influenced by changes in consumer preferences and seasonality. These operational complexities provide particular challenges in the financial reporting and audit processes, especially in terms of inventory valuation, revenue recognition, and compliance with food safety standards that can affect the duration of the audit process.

The strategic importance of the food and beverage sector in Indonesia's economy is evidenced by its significant contribution to national GDP. In 2022, the GDP of the food and beverage industry grew by 4.90% with a contribution of 38.35% to the GDP of the non-oil and gas processing industry (Komdigi, 2023). This sector's development continues to show positive trends, where in 2023 it contributed 39.10% to non-oil and gas industry GDP and 6.55% to national GDP (Waluyo, 2024). Despite this significant growth, the audit report lag phenomenon in the food and beverage sector has become a serious concern, particularly given its strategic role in the national economy.

The urgency of addressing audit report lag issues becomes more apparent when considering the regulatory requirements and market expectations. According to the Financial Services Authority Regulation of the Republic of Indonesia Number 14/POJK.04/2022 concerning the Submission of Financial Reports, the deadline for submitting financial reports of the previous year (fiscal year) is March 31 of the following year. Late audit reports can reduce the level of relevance, usefulness, and economic value of financial information (Bhuiyan et al., 2024), creating significant implications for various stakeholders including investors, creditors, and regulators.

Audit Report Lag can be viewed from various perspectives, both in agency theory and signaling theory. Agency theory explains the separation between ownership and control that triggers potential conflicts between agents (managers) and company owners (principals) in a company (Hassan, 2018). To control and monitor management decisions, principals will incur costs, including audit costs for financial statements. The role of auditing financial statements is to narrow the information gap between management and company owners, which also illustrates that

audited financial statements are part of the signaling theory mechanism because with independent parties, there are parties who have the competence to ensure the accuracy of information (material in nature) presented (Durand, 2018).

From a signaling theory perspective, Audit Report Lag can be viewed both positively and negatively. Positively, the existence of Audit Report Lag reflects audit effort by auditors (Bryan & Mason, 2020), ensuring that financial reports presented by companies to the public truly reflect the actual conditions of the company and demonstrate auditor seriousness in examining and verifying all existing data. The selection of auditors with industry specialization shows company commitment to higher audit quality through in-depth verification, becoming a positive signal to the market despite potentially requiring longer audit time (Ismail et al., 2022). Negatively, untimely audit reports can increase information asymmetry and create rumors about the company's financial condition, potentially leading to stock price crashes (Bhuiyan et al., 2024).

Based on research by Rizkyta & Yasin (2024) and de-Olivera (2024), the food and beverage sector faces special challenges in financial reporting and audit processes. These challenges include supply chain complexity requiring deeper verification, raw material price fluctuations affecting inventory valuation, and compliance with strict regulations regarding safety and product standards. Additionally, inadequate internal control systems in some companies further extend the audit process and potentially increase Audit Report Lag. The complexity is reflected in ARL data analysis from 25 food and beverage companies listed on IDX during the 2019–2024 period, showing a consistent decreasing trend in ARL from an average of 107.2 days (2020) to 93.2 days (2021), then 88.4 days (2022), and 84.6 days (2023). Despite general improvement, significant disparities exist among companies, with some issuers successfully improving ARL while others continue to experience high ARL.

Several factors are suspected to influence Audit Report Lag, including earnings volatility, audit committee meetings, and audit tenure. Earnings volatility reflects fluctuations or instability of company profits over time (Nastiti et al., 2024), where higher earnings volatility represents greater premium risk and requires deeper verification to ensure that profit fluctuations truly occur according to factual conditions. The motivation to achieve certain targets can make management ignore good business practices, potentially resulting in earnings management, producing profits that are too stable or too fluctuating. Higher earnings volatility in companies represents greater premium risk (Egiyi et al., 2023), requiring deeper verification and increasing audit fees. Particularly in non-financial sectors such as manufacturing and property, earnings volatility levels tend to be higher compared to financial sectors due to greater vulnerability to raw material price fluctuations, production costs, and property market conditions (Yendrawati & Mahendra, 2018).

However, previous research data shows result uncertainty where some studies mention higher earnings volatility affects Audit Report Lag (Egiyi et al., 2023; Marsintauli & Pribadi, 2023), while other research shows lower earnings volatility actually produces premium risk that can increase Audit Report Lag (Bryan & Mason, 2020) to ensure that company profits are free from suspected earnings management. In conditions of both high and low earnings volatility, the

presence of auditors with industry specialization becomes important because deep understanding of industry characteristics can help detect errors or deviations more effectively (Shams, 2020).

The role of audit committees as part of corporate governance mechanisms has become increasingly important since the implementation of Sarbanes-Oxley 404 in the United States, which requires companies to meet good internal control criteria. The existence of these regulations increases Audit Report Lag conditions (Durand, 2018) because auditors need additional time for verification from companies to prove that internal control elements have been complied with. Audit committees are called monitoring mechanisms that can improve report quality, reduce information asymmetry, reduce irregularities, and unreliable statements. Research by Hassan (2018) shows that audit committees are an important part of corporate governance mechanisms to produce good internal controls, which then increases Audit Report Lag. Research by Durand (2018) shows that the more independent and larger the audit committee, the faster the Audit Report Lag tends to be, while share ownership by audit committees actually makes Audit Report Lag longer (Bhuiyan et al., 2024).

Audit tenure, referring to the number of years auditors engage with clients as regulated in government regulation PP/20/2005 article 11 where audit firms can provide services to clients for a maximum of 5 consecutive fiscal years according to agreements between auditors and companies (Latiefah & Handayani, 2024), also shows inconsistent research results. Research by Latiefah & Handayani (2024) shows that audit tenure significantly and positively affects Audit Report Lag, while previous research by Affifah & Susilowati (2021) and Wardani et al. (2022) shows audit tenure does not significantly affect Audit Report Lag. These inconsistent results indicate the existence of other factors that can moderate these relationships, one of which is auditor industry specialization that can improve audit process efficiency (Fayyum et al., 2019).

The complexity of every company's industry requires auditor competence and experience so as not to waste time learning company business models. The longer auditor experience in handling a company or industry will result in shorter Audit Report Lag (Bryan & Mason, 2020). This is further strengthened when auditors have industry specialization (auditor industry specialization) that matches the company being audited, as deep understanding of industry characteristics can accelerate the audit process (Dao & Pham, 2014). The presence of auditors with industry specialization can help optimize audit committee functions because both parties can communicate more effectively with deep industry understanding, supported by findings from Singhvi & Feng (2021) showing that audit committees with larger proportions of audit experts tend to choose industry specialist auditors for more effective communication in the oversight process.

The novelty of this research lies in adding auditor industry specialization as a moderating variable that can strengthen or weaken the influence of earnings volatility, audit committee meetings, and audit tenure on Audit Report Lag. The selection of this moderating variable is highly relevant considering the complexity of business processes in the food and beverage sector requires auditors with deep industry understanding to produce effective and efficient audits. Previous research has not specifically examined the moderating role of auditor industry specialization in the

context of the food and beverage sector in Indonesia, particularly during the period that includes the impact of the COVID-19 pandemic on business operations and financial reporting.

This research aims to analyze the effect of earnings volatility, audit committee meetings, and audit tenure on audit report lag with auditor industry specialization as a moderating variable in food and beverage sector companies listed on IDX for the period 2019–2024. The practical benefits of this research for various stakeholders include: for investors, providing evaluation of investment risks and decision-making based on governance quality; for companies, optimizing audit committee effectiveness and financial reporting efficiency; for auditors, understanding factors affecting audit duration and improving service quality; for regulators, developing evidence-based policies and improving oversight standards; and for academics, contributing to audit and corporate governance literature with empirical evidence from emerging markets.

The implications of this research extend beyond academic contributions to practical applications in improving financial reporting efficiency and audit quality in Indonesia's capital market. By understanding the factors that influence audit report lag and the moderating role of auditor industry specialization, stakeholders can make more informed decisions regarding audit engagement, governance practices, and regulatory frameworks. This research is expected to contribute to the development of best practices in financial reporting and auditing, particularly in sectors with unique operational characteristics such as food and beverage companies.

METHOD

This research used quantitative methods with a causal approach to determine the cause-and-effect relationship between independent variables and dependent variables. The research design is panel data analysis, which is a combination of time series and cross-section data with an observation period of 6 years from 2019-2024.

The population of this study is food and beverage sector companies listed on the Indonesia Stock Exchange for the period 2019-2024. The sample selection uses purposive sampling method with the following criteria: (1) Food and beverage companies listed on IDX for the period 2019-2024; (2) Companies that consistently publish financial statements during the research period; (3) Companies that provide disclosure of public accountant audit service fees in financial reports or annual reports. Based on these criteria, 22 companies were obtained as research samples, so the total observations were 132 data (22 companies × 6 years).

Data collection uses secondary data obtained from audited financial reports, annual reports, and independent audit reports accessed through the official IDX website (www.idx.co.id) and individual company websites. The operational variables in this study are:

1. Audit Report Lag (Y): Measured as the difference between the fiscal year-end date and the audit report date (Mufidah & Laily, 2019).
2. Earnings Volatility (X1): Measured using the standard deviation of ROA (Return on Assets) over the observation period (Marsintauli & Pribadi, 2023).
3. Audit Committee Meetings (X2): Measured as the number of audit committee meetings in one year (Arie Susandya & Suryandari, 2021).

4. Audit Tenure (X3): Measured as the number of engagement years with independent auditors (Suwarno et al., n.d.).
5. Auditor Industry Specialization (Z): Measured using market share of audit firms in the food and beverage industry, where firms with market share > 30% are classified as specialists (Shams, 2020).

The data analysis technique uses panel data regression with fixed effect model. Classical assumption tests are conducted including multicollinearity and heteroscedasticity tests. Model selection is performed through Chow Test, Hausman Test, and Lagrange Multiplier Test. Hypothesis testing uses simultaneous test (F test), coefficient of determination test (R^2), and partial test (t test) with a significance level of 5%.

Two regression models are used:

Model 1 (Without Moderation): $ARL = \alpha + \beta_1 EV + \beta_2 RKA + \beta_3 AT + \beta_4 AIS + \varepsilon$

Model 2 (With Moderation): $ARL = \alpha + \beta_1 EV + \beta_2 RKA + \beta_3 AT + \beta_4 (EV \times AIS) + \beta_5 (RKA \times AIS) + \beta_6 (AT \times AIS) + \varepsilon$

RESULT AND DISCUSSION

Descriptive Statistics Analysis

The descriptive statistical analysis provides a comprehensive overview of the characteristics of research data from 22 food and beverage companies during the 2019-2024 period with a total of 132 observations. This analysis aims to answer the first research objective regarding the descriptive results of earnings volatility, audit committee meetings, audit tenure, auditor industry specialization, and audit report lag in food and beverage sector companies listed on the Indonesia Stock Exchange.

Table 1. Descriptive Statistics Results

Variable	Mean	Maximum	Minimum	Std. Dev.	Observations
Earnings Volatility (X1)	0.004167	0.016929	0.000443	0.003639	132
Audit Committee Meetings (X2)	0.863636	1.000000	0.000000	0.344482	132
Audit Tenure (X3)	0.643939	1.000000	0.000000	0.480658	132
Auditor Industry Specialization (Z)	0.280303	1.000000	0.000000	0.450858	132
Audit Report Lag (Y)	90.53030	177.0000	52.00000	24.24885	132

Earnings Volatility Analysis

This research uses the standard deviation of ROA (Return on Asset) as an indicator of earnings volatility, calculated using the formula:

$$\textit{Std. Dev ROA} = \sqrt{\textit{Variance ROA}}$$

The earnings volatility shows an average value of 0.004167 with a standard deviation of 0.003639. The average earnings volatility being greater than the standard deviation indicates that earnings volatility is clustered and not highly varied. The highest earnings volatility value owned by food and beverage sector companies is 0.016929, while the lowest earnings volatility value is 0.000443. This finding shows that the food and beverage sector has relatively low profit

fluctuations, consistent with the industry characteristics that have stable demand patterns because food and beverage products are basic necessities (Bryan & Mason, 2020).

The relatively low earnings volatility in this sector can be attributed to the stable nature of consumer demand for food and beverage products, which are considered essential goods. However, the variation between companies indicates that some firms experience more volatile earnings due to factors such as raw material price fluctuations, seasonal demand patterns, and competitive pressures. Companies with higher earnings volatility may face challenges related to supply chain management, product diversification, or market positioning strategies.

Audit Committee Meetings Analysis

This research uses the frequency of audit committee meetings divided by the criteria of minimum 4 times per year as an indicator of audit committee effectiveness. The audit committee meetings show an average value of 0.863636 with a standard deviation of 0.344482. The average audit committee meetings being greater than the standard deviation indicates that audit committee meetings are clustered and not highly varied. The highest value indicates companies conducting meetings at least 4 times per year, while the lowest value represents companies not meeting this criteria.

This finding reflects the commitment of food and beverage sector companies to implementing good governance, as stated by Durand (2018) that audit committees play an important role in internal control mechanisms. The high average indicates that most companies in the sample recognize the importance of regular audit committee meetings in ensuring effective oversight of financial reporting processes. Companies with more frequent audit committee meetings demonstrate stronger governance practices and more proactive approaches to risk management.

Audit Tenure Analysis

This research uses audit engagement tenure as an indicator of audit tenure, measured as the number of engagement years with independent auditors using the formula:

Audit tenure = Number of engagements with independent auditor/public accountant

The audit tenure shows an average value of 0.643939 with a standard deviation of 0.480658. This indicates that the average audit tenure is greater than the standard deviation, showing that audit tenure data is clustered and not highly varied. The highest audit tenure value belongs to companies with long-term audit relationships, while the lowest value belongs to companies with shorter audit relationships.

This finding aligns with research by Arumningtyas & Ramadhan (2019) stating that long audit tenure can result in audit efficiency. The tendency toward longer audit tenure in the food and beverage sector suggests that companies value continuity and the deep understanding that auditors develop over time regarding industry-specific risks and operational complexities. Long-term relationships allow auditors to accumulate knowledge about client business processes, internal controls, and industry regulatory requirements.

Auditor Industry Specialization Analysis

This study uses the market share of KAP in the food and beverage industry as an indicator of industry specialization auditors. The average score of industry specialization auditors is 0.280303, while the standard deviation value is 0.450858. This value indicates that the average value of an industry specialization auditor is smaller than the standard deviation value. This shows that data from industry specialization auditors varies. The highest score of the industry specialization auditor indicates the use of specialist auditors, while the lowest score indicates the use of non-specialist auditors. These findings indicate that food and beverage sector companies are beginning to realize the importance of auditors with a deep understanding of industry characteristics, as stated by Wiedjaja & Eriandani (2021).

Audit Report Lag Analysis

This research uses the difference in days between the fiscal year-end date and the audit report date as an indicator for audit report lag, calculated using the formula:

Audit Report Lag = Σ Difference in days between fiscal year and audit statement

The audit report lag shows an average value of 90.53030 days with a standard deviation of 24.24885 days. This indicates that the average audit report lag is greater than the standard deviation, showing that audit report lag data is clustered and not highly varied. The highest audit report lag is 177 days, while the lowest audit report lag is 52 days.

The average audit report lag approaching the maximum limit of 90 days shows challenges in the food and beverage sector audit process, consistent with findings by de-Olivera (2024) that this sector faces specific complexities in inventory verification and food safety regulation compliance. The significant variation between companies suggests that some firms have developed more efficient reporting processes or benefit from better internal controls and audit committee oversight.

Classical Assumption Tests

Classical assumption tests were conducted to ensure the reliability and validity of the regression model used in this research.

Multicollinearity Test

The multicollinearity test aims to examine whether the regression model shows correlation between independent variables.

Table 2. Multicollinearity Test Results

Variable	X1	X2	X3	Z
X1	1.000000	-0.056591	-0.056593	0.120069
X2	-0.056591	1.000000	0.073345	-0.145216
X3	-0.056593	0.073345	1.000000	0.006138
Z	0.120069	-0.145216	0.006138	1.000000

The multicollinearity test results show correlation values between independent variables are all below 0.8, indicating no multicollinearity problems in the research model. The highest correlation is between earnings volatility (X1) and auditor industry specialization (Z) at 0.120069, which is still far below the critical threshold of 0.8. This confirms that each independent variable provides unique information and contributes independently to explaining variations in audit report lag.

Heteroscedasticity Test

The heteroscedasticity test aims to examine whether the regression model shows variance differences for different independent variables.

Table 3. Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.55944	6.125172	3.030027	0.0031
X1	34.90746	220.5782	0.158254	0.8746
X2	-4.177088	2.354077	-1.774406	0.0789
X3	-9.581361	9.022191	-1.061977	0.2907
Z	-0.326002	2.476579	-0.131634	0.8955

The heteroscedasticity test shows Obs*R-squared probability of 0.0499, which is close to 0.05, indicating no significant heteroscedasticity problems in the research model. This confirms that the variance of residuals is relatively constant across different levels of independent variables, meeting the assumption of homoscedasticity required for reliable regression analysis.

Panel Data Model Selection

Model selection was conducted through three sequential tests to determine the most appropriate panel data estimation method.

Chow Test

The Chow Test is used to determine whether the fixed effect model or common effect model is most appropriate.

Table 4. Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	8.543848	(21,106)	0.0000
Cross-section Chi-square	130.749371	21	0.0000

The Chow Test results show that the cross-section Chi-square probability value is 0.0000, which is less than the significance level of 0.05, meaning H0 is rejected. Therefore, the fixed effect model is better than the common effect model.

Hausman Test

The Hausman Test is used to determine whether to use the fixed effect model or random effect model.

Table 5. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	19.368617	4	0.0007

The Hausman Test results show that the cross-section random probability value is 0.0007, which is less than the significance level of 0.05, meaning H0 is rejected. Therefore, the fixed effect model is better than the random effect model. Consequently, the Lagrange Multiplier Test is not needed, and the fixed effect model is considered the best model in this research.

Panel Data Regression Analysis

Based on the model selection tests, the fixed effect model was determined as the most appropriate approach for this research. Two models were analyzed: without moderation and with moderation to examine the role of auditor industry specialization.

Model Without Moderation

Table 6. Fixed Effect Model Results Without Moderation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	118.3024	10.51864	11.24692	0.0000
Earnings Volatility (X1)	884.4153	378.7948	2.334814	0.0214
Audit Committee Meetings (X2)	-11.10823	4.042612	-2.747785	0.0071
Audit Tenure (X3)	-53.45600	15.49364	-3.450190	0.0008
Auditor Industry Specialization (Z)	44.80360	4.252983	10.53463	0.0000

Model Statistics	Value
R-squared	0.745430
Adjusted R-squared	0.685391
F-statistic	12.41557
Prob(F-statistic)	0.000000

The regression equation without moderation can be formulated as:

$$Y = 118.3024 + 884.4153(X1) - 11.10823(X2) - 53.45600(X3) + 44.80360(Z) + \varepsilon$$

Model With Moderation

Table 7. Fixed Effect Model Results With Moderation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	105.7294	10.89734	9.702318	0.0000
Earnings Volatility (X1)	646.5382	409.2222	1.579920	0.1172
Audit Committee Meetings (X2)	-4.677725	5.133163	-0.911275	0.3643
Audit Tenure (X3)	-38.39352	15.30187	-2.509074	0.0137
Auditor Industry Specialization (Z)	52.03691	9.307377	5.590932	0.0000
X1 × Z	2049.450	922.6594	2.221243	0.0285
X2 × Z	-15.16801	7.484093	-2.026700	0.0453
X3 × Z	-17.48114	8.151788	-2.144455	0.0343

Model Statistics	Value
R-squared	0.780491
Adjusted R-squared	0.720819
F-statistic	13.07964
Prob(F-statistic)	0.000000

The regression equation with moderation can be formulated as:

$$Y = 105.7294 + 646.5382(X1) - 4.677725(X2) - 38.39352(X3) + 52.03691(Z) + 2049.450(X1\times Z) - 15.16801(X2\times Z) - 17.48114(X3\times Z) + \varepsilon$$

Hypothesis Testing Results

Simultaneous Test (F Test)

The simultaneous test examines whether all independent variables simultaneously influence the dependent variable.

Table 8. Simultaneous Test Results

Model	F-statistic	Prob(F-statistic)	Conclusion
Without Moderation	12.41557	0.000000	Significant
With Moderation	13.07964	0.000000	Significant

Both models show F-statistic probability values of 0.000000 < 0.05, indicating that all independent variables simultaneously influence audit report lag. The increase in F-statistic from 12.41557 to 13.07964 demonstrates that the addition of moderating variables improves the overall model fit.

Coefficient of Determination (R^2)

Table 9. Model Comparison Results

Model	R-squared	Adjusted R-squared	Improvement
Without Moderation	0.745430	0.685391	-
With Moderation	0.780491	0.720819	3.54%

The model with moderation shows better explanatory power with an Adjusted R-squared of 72.08% compared to 68.54% without moderation. This 3.54 percentage point improvement demonstrates the important role of auditor industry specialization as a moderating variable.

Partial Test Results (t Test)

Effect of Earnings Volatility on Audit Report Lag

The test results show that earnings volatility has a significant positive effect on audit report lag with a coefficient of 884.4153 and probability of 0.0214 < 0.05. This finding answers the second research objective.

Table 10. Earnings Volatility and Audit Report Lag Cross-tabulation

Earnings Volatility	ARL Above Average	ARL Below Average	Total
Above Average	17	33	50
Below Average	16	66	82

Total	33	99	132

This finding is consistent with research by Egiyi et al. (2023), indicating that higher earnings volatility requires deeper verification by auditors, thus extending audit completion time. The cross-tabulation shows that companies with higher earnings volatility tend to have longer audit report lag, supporting the regression results.

As stated by Dandriansyah et al. (2023), internal audit plays a role in consistently reviewing internal control structures through understanding and discovering symptoms indicating risk occurrence, so higher earnings volatility requires more comprehensive audit procedures. Auditors facing companies with high earnings volatility must conduct additional procedures to ensure that fluctuations reflect actual business conditions rather than earnings management practices.

Effect of Audit Committee Meetings on Audit Report Lag

The test results show that audit committee meetings have a significant negative effect on audit report lag with a coefficient of -11.10823 and probability of 0.0071 < 0.05. This finding answers the third research objective.

Table 11. Audit Committee Meetings and Audit Report Lag Cross-tabulation

Audit Committee Meetings	ARL Above Average	ARL Below Average	Total
Above Average	25	89	114
Below Average	8	10	18
Total	33	99	132

This result aligns with research by Durand (2018) and Hassan (2018), showing that effective audit committees can reduce audit report lag through better oversight and coordination. The cross-tabulation clearly demonstrates that companies with more frequent audit committee meetings tend to have shorter audit report lag.

As stated by Pratomo & Sudibyo (2023), audit committees serve as mediators in controlling activities conducted by company management with stakeholders, where audit committee activities can be demonstrated through the number of their meetings. Higher meeting frequency indicates more active audit committee roles in control and improving company value. Intensive communication between audit committees and external auditors facilitates better coordination in the audit process.

Effect of Audit Tenure on Audit Report Lag

The test results show that audit tenure has a significant negative effect on audit report lag with a coefficient of -53.45600 and probability of 0.0008 < 0.05. This finding answers the fourth research objective.

Table 12. Audit Tenure and Audit Report Lag Cross-tabulation

Audit Tenure	ARL Above Average	ARL Below Average	Total
Above Average	17	68	85
Below Average	16	31	47
Total	33	99	132

This finding supports research by Arumningtyas & Ramadhan (2019), indicating that longer audit tenure allows auditors to be more efficient due to deeper understanding of client business characteristics. The cross-tabulation shows that companies with longer audit tenure predominantly have shorter audit report lag.

This can be explained because auditors with long-term engagement relationships have developed deep understanding of operations, business risks, and company accounting systems. As stated by Dao & Pham (2014), long audit tenure enables auditors to be more efficient in conducting audit processes due to familiarity with client business characteristics. In the context of the food and beverage sector with specific complexities such as inventory verification and food safety regulation compliance, accumulated auditor experience through long audit tenure becomes an important factor in accelerating audit completion.

Moderation Analysis

Auditor Industry Specialization Moderating Earnings Volatility and Audit Report Lag

The test results show that auditor industry specialization significantly moderates the relationship between earnings volatility and audit report lag with an interaction coefficient (X1Z) of 2049.450 and probability of 0.0285 < 0.05. This finding answers the fifth research objective.

Table 13. Interaction of Earnings Volatility with Auditor Industry Specialization

EV × AIS Interaction	ARL Above Average	ARL Below Average	Total
Above Average	16	15	31
Below Average	17	84	101
Total	33	99	132

This finding shows that auditor industry specialization strengthens the positive effect of earnings volatility on audit report lag. This can be explained because specialist auditors have stricter professional standards in maintaining their reputation as specialists. When facing high earnings volatility, specialist auditors tend to conduct deeper and more comprehensive audit procedures to ensure audit quality remains maintained.

As stated by Murti & Firmansyah (2017), auditor independence significantly affects audit quality, where auditors with industry specialization have superior technical capabilities in identifying material risk areas and providing objective assessments. Specialist auditors will not compromise audit quality despite requiring longer time, demonstrating their responsibility in maintaining credibility in specific industries.

Auditor Industry Specialization Moderating Audit Committee Meetings and Audit Report Lag

The test results show that auditor industry specialization significantly moderates the relationship between audit committee meetings and audit report lag with an interaction coefficient (X2Z) of -15.16801 and probability of 0.0453 < 0.05. This finding answers the sixth research objective.

Table 14. Interaction of Audit Committee Meetings with Auditor Industry Specialization

RKA × AIS Interaction	ARL Above Average	ARL Below Average	Total
Above Average	10	19	29
Below Average	23	80	103
Total	33	99	132

This finding shows that collaboration between active audit committees and specialist auditors creates synergy that optimizes the audit process. Specialist auditors with deep understanding of food and beverage sector characteristics can communicate more effectively with audit committees regarding industry-specific risks.

As stated by Singhvi & Feng (2021), audit committees with larger proportions of audit experts tend to choose industry specialist auditors because they can communicate more effectively in oversight processes. This enables identification and resolution of audit problems to be conducted more quickly and efficiently, resulting in significant reduction in audit report lag.

Auditor Industry Specialization Moderating Audit Tenure and Audit Report Lag

The test results show that auditor industry specialization significantly moderates the relationship between audit tenure and audit report lag with an interaction coefficient (X3Z) of -17.48114 and probability of 0.0343 < 0.05. This finding answers the seventh research objective.

Table 15. Interaction of Audit Tenure with Auditor Industry Specialization

AT × AIS Interaction	ARL Above Average	ARL Below Average	Total
Above Average	5	19	24
Below Average	28	80	108
Total	33	99	132

This finding shows that the combination of long audit tenure and industry specialization creates optimal conditions for audit efficiency. Specialist auditors who have maintained long-term relationships with clients not only understand client business characteristics deeply but also possess special expertise in auditing food and beverage sector companies.

As stated by Diana & Hidayat (2022), auditor industry specialization can improve auditor understanding of companies supported by long engagement periods with client characteristics, resulting in more efficient audit processes. This condition enables auditors to complete audits more quickly without sacrificing audit quality, creating the most efficient combination for audit report lag reduction.

The comprehensive analysis of moderation effects demonstrates that auditor industry specialization plays a crucial role in shaping the relationships between various factors and audit report lag. The positive moderation on earnings volatility reflects the thorough approach of specialist auditors when dealing with volatile earnings, while the negative moderation on audit committee meetings and audit tenure shows how specialization enhances the efficiency gains from good governance and long-term relationships. These findings provide valuable insights for companies, auditors, and regulators in optimizing audit processes and improving financial reporting timeliness in the food and beverage sector.

CONCLUSION

This research finds that earnings volatility significantly increases audit report lag due to the need for deeper auditor verification, while audit committee meetings and audit tenure significantly reduce lag by enhancing oversight and auditor efficiency, respectively. Auditor industry specialization plays a crucial moderating role, amplifying the impact of earnings volatility and strengthening the beneficial effects of audit committee meetings and audit tenure on reducing audit report lag. The model including this moderation explains audit report lag better (72.08%) than the model without it (68.54%), highlighting the importance of specialist auditors in improving audit efficiency. These results suggest companies should optimize audit committee functions, manage audit tenure wisely, and engage auditors with industry expertise to enhance financial reporting timeliness and quality. Future research could explore how digital auditing technologies interact with auditor specialization and governance factors to further reduce audit report lag.

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